Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or s	gent's file referen	ne T							
PH-193	-	FOR FURTHER	ACTION	See Form PCT/IPEA/416					
International ap	plication No.	International filing d	late (day/month/year)	Priority date (day/month/year)					
PCT/JP	2004/001	290 06.02.200)4	30.06.2003					
	atent Classification	n (IPC) or national classification and	I IPC						
Applicant HITACH	I, LTD.								
 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 									
2. This	REPORT consists	of a total of 7	sheets, includir	ng this cover sheet.					
3. This	report is also accor	mpanied by ANNEXES, comprising	; :						
ا ا	(sent to the	applicant and to the International B	tureau) a total of	sheets, as follows:					
<u>-</u>				amended and are the basis for this report and/or					
	☐ sheets			ule 70.16 and Section 607 of the Administrative					
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
ь. [(sent to the	International Bureau only) a total o	f (indicate type and number	er of electronic carrier(s))					
				, containing a sequence listing and/or tables					
		o, in computer readable form only, f the Administrative Instructions).	as indicated in the Supple	emental Box Relating to Sequence Listing (see					
4. This	report contains ind	lications relating to the following ite	ems:						
\boxtimes	Box No. I	Basis of the report							
	Box No. II	Priority							
	tive step and industrial applicability								
	Box No. IV	Lack of unity of invention							
\boxtimes	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
	Box No. VI	Certain documents cited							
	Box No. VII Certain defects in the international application								
\boxtimes	Box No. VIII Certain observations on the international application								
Date of submis	sion of the deman	d	Date of completion of the	nis report					
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Name and mailing address of the IPEA/JP			Authorized officer						
Facsimile No.			Telephone No.						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/001290

Bo	x No. I		Basis of the report					
1.			to the language, this report is based on the internation der this item.	nal application in the language is	n which it was filed, unless otherwise			
		which	eport is based on translations from the original langua is the language of a translation furnished for the purp		·			
	1		nternational search (Rule 12.3 and 23.1(b))					
	i		publication of the international application (Rule 12.4) nternational preliminary examination (Rule 55.2 and/					
2.	receiv	regard ving Of eport):	to the elements of the international application, this fice in response to an invitation under Article 14 are terrational application as originally filed/furnished	report is based on (replacement	sheets which have been furnished to the originally filed" and are not annexed to			
			scription:					
		pages			as originally filed/furnished			
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	Ш	the dra	awings:					
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		a seque	ence listing and/or any related table(s) - see Suppleme	ental Box Relating to Sequence	Listing.			
3.		The an	nendments have resulted in the cancellation of:					
1	[□ .	he description, pages					
	[، 🗀	he claims, nos.					
	[□ .	the drawings, sheets/figs					
	Ī		he sequence listing (specify):					
	Ī		any table(s) related to sequence listing (specify):	,	W.,			
4.		This re	eport has been established as if (some of) the amendave been considered to go beyond the disclosure as file					
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/001290

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tatement			
Novelty (N)		2, 3-6, 8-15, 17, 18, 20-24	YES
	Claims	1, 7, 16, 19	NO
Inventive step (IS)		4, 6, 10-13, 15, 22-24	YES
	Claims	1-3, 5, 7-9, 14, 16-21	NO
Industrial applicability (IA)		1-24	YES
	Claims		NO
	Inventive step (IS)	Novelty (N) Claims Claims Inventive step (IS) Claims Claims Claims Claims	Novelty (N) Claims 2, 3-6, 8-15, 17, 18, 20-24 Claims 1, 7, 16, 19 Inventive step (IS) Claims 4, 6, 10-13, 15, 22-24 Claims 1-3, 5, 7-9, 14, 16-21 Industrial applicability (IA) Claims 1-24

- 2. Citations and explanations (Rule 70.7)
 - Document 1: JP 10-104114 A (Nissan Motor Co., Ltd.), 24

 April 1998
 - Document 2: JP 2003-155959 A (Denso Corp.), 30 May 2003
 - Document 3: JP 2002-81349 A (Toyota Motor Corp.), 22

March 2002

Document 4: JP 8-35452 A (Hitachi, Ltd.), 06 February 1996

Claims 1 and 16

Document 1 discloses a device and a method for diagnosing evaporative leaks by means of a leak determination means that operates the pump while the evaporation purge system is shielded from the atmosphere by means of a shielding means and then determines whether or not there is a leak based upon the length of time that said pump was operated and the pressure change value after said pump is stopped.

Therefore, the inventions set forth in claims 1 and 16 lack novelty in the light of document 1 cited in the international search report.

International application No.

citations and explanations supporting such statement Claims 2 and 17

Box No. V

Document 2 discloses the feature of carrying out a process for determining whether or not there is a leak while the internal combustion motor is stopped.

Thus, it would have been easy for a person skilled in the art to conceive of employing the technical feature that is disclosed in document 2 in the device for diagnosing evaporative leaks that is disclosed in document 1; therefore, the inventions set forth in claims 2 and 17 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

Claims 3 and 18

Document 1 discloses a configuration wherein there is determined to be a leak in cases when the length of time that the pump was operated exceeds a maximum period that was set in advance, and a configuration wherein there is determined to be a leak in cases when the pressure change value falls below a target pressure that was set in advance.

Thus, it would have been easy for a person skilled in the art to conceive of using both of the determination conditions that are disclosed in document 1; therefore, the inventions set forth in claims 3 and 18 do not involve an inventive step in the light of document 1 cited in the international search report.

Claim 5

Document 3 discloses the feature of prohibiting the implementation of a process for determining whether or not there is a leak in cases when the change in the

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

pressure of the shielded evaporation purge system exceeds a prescribed value.

Thus, it would have been easy for a person skilled in the art to conceive of employing the technical feature that is disclosed in document 3 in the device for diagnosing evaporative leaks that is disclosed in document 1; therefore, the invention set forth in claim 5 does not involve an inventive step in the light of documents 1 and 3 cited in the international search report.

Claims 7 and 19

Document 4 discloses a device and a method for diagnosing evaporative leaks by means of a leak determination means that operates the pump while the evaporation purge system is in a shielded state and then determines whether or not there is a leak based upon the changes in the pressure during the operation of said pump and the pressure change value after said pump has been stopped for a prescribed period of time.

Therefore, the inventions set forth in claims 7 and 19 lack novelty in the light of document 4 cited in the international search report.

Claims 8 and 20

It would have been easy for a person skilled in the art to conceive of employing the technical feature that is disclosed in document 2 in the device for diagnosing evaporative leaks that is disclosed in document 4; therefore, the inventions set forth in claims 8 and 20 do not involve an inventive step in the light of documents 2 and 4 cited in the international search report.

citations and explanations supporting such statement

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;

Claims 9 and 21

Document 4 discloses a configuration wherein there is determined to be a leak in cases when the changes in the pressure during the operation of the pump exceed a prescribed pressure difference.

Meanwhile, document 1 discloses a configuration wherein there is determined to be a leak in cases when the pressure change value falls below a target pressure.

Thus, it would have been easy for a person skilled in the art to conceive of using both of the determination conditions that are disclosed in the documents in question; therefore the, inventions set forth in claims 9 and 21 do not involve an inventive step in the light of documents 1 and 4 cited in the international search report.

Claim 14

It would have been easy for a person skilled in the art to conceive of employing the technical feature that is disclosed in document 3 in the device for diagnosing evaporative leaks that is disclosed in document 4; therefore, the invention set forth in claim 14 does not involve an inventive step in the light of documents 3 and 4 cited in the international search report.

Claims 4, 6, 10 to 13, 15 and 22 to 24

The technical features that are set forth in the abovementioned claims are not disclosed or suggested in any of the documents that are cited in the international search report.

Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 15

Claim 15 cites claim 1; therefore, the content set forth therein is substantially the same as the content that is set forth in claim 6.

Claim 21

Claim 21 cites claim 7, which sets forth the invention of a device; therefore, it is unclear whether claim 21 is intended to set forth a method or a device.